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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
LEE, MARINA				
ART UNIT		PAPER NUMBER		
2192				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/799,448

Applicant(s)

FUKUI, SHINJI

Examiner

MARINA LEE

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 23, 2008 has been entered.
2. This action is responsive to Amendment filed on July 23, 2008. Claims 1, 5, 6, have been amended. Claims 7 and 8 have been newly added. No claims have been cancelled. Thus, Claims 1-8 are presented for examination.

Prior Art's Arguments - Rejections

3. Applicant's arguments filed on July 23, 2008, especially on pages 6-7 of Remarks, in responding to the Office Action dated April 30, 2008, with respect to the new limitation "said function blocks serving to use a language element referred to as function block definitions to establish input and output parameters, internal variables and operations algorithms of function block and to create copies referred to as function block instances by instantiating said function block definitions when said function block is incorporated in a user program", currently recites in per independent claims 1, 5, 6, respectively, have been fully considered but they are moot in view of new ground of Rejection under (Eldridge et al.(US 7,272,815 B1) made of record) as will be detail addressed under *Claims Rejections* below.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1- 4 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1 (line 8) recites to include the limitation – “said program”, which make the claim 1 limitation indefinite because it (“said program”) opens to two interpretations as note below:

- a. “said program” (line 8) is equivalent to “a program” of line 1; or
- b. “said program” (line 8) is equivalent to “a program” of line 7.

For expedited the process of prosecution application, Examiner shall interpret “said program” line 8 of claim 1 to be equivalent to (a) interpretation above.

Appropriated Correction is required.

Claims 2-4 and 7 are also rejected to for being depended upon the rejection of the base claim 1 mentioned above.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects

for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-8 are rejected under 35 USC § 102(e) as being anticipated by Eldridge et al. (US 7,272,815 B1 made of record – hereinafter Eldridge).

As to claim 1, Eldridge discloses a display and edit device for a program containing function blocks – (e.g., *Ladder Logic Diagram D (Fig. 94), which contains Program Logic Blocks (PLBs) – See at least col. 104: 1-10*) , said function blocks serving to use a language element referred to as function block definitions to establish input and output parameters, internal variables and operations algorithms of the function block and to create copies referred to as function block instances by instantiating said function block definitions when said function block is incorporated in a user program, -- (e.g., *Ladder Diagram Editor (Fig. 95), which conjunction with the Ladder library (ladder element (functions block definitions: emphasis added)) for implementing the ladder diagram logic – See at least col. 104: 1-65 and col. 105: 1-35 with emphasis added*) , said device comprising:

a program memory storing a program to be processed (e.g., *ladder diagram editor would be implied that a processor/memory must be presented some how for the ladder diagram editor to be implemented – See at least Fig. 95 with associated text*);

a block definition analyzer for accessing said program stored in said program memory and analyzing structure relationship of function block definitions contained in said program (e.g., *ladder library, which contains common ladder element for carrying the ladder diagram logic – See at least col. 104: 11-59 and col. 106: 13-24, with emphasis added*);

a block instance analyzer for accessing said program stored in said program memory and analyzing structure relationship of function block instances contained in said program (*e.g., the ladder elements (object) are selected (instantiated) from the ladder library – See at least col. 104, 11-26, Fig. 95 and associated text, with emphasis added*); and

a structure display device for causing to simultaneously display structure relationship of the analyzed structure relationship of said function block definition and structure relationship of the analyzed structure relationship of said function block instance – (*e.g., the displaying of the elements for carrying out the ladder logic diagram in the Ladder Diagram Editor – See at least Fig. 95, col. 104: 1-65 and col. 105: 1-35, with emphasis added*).

As to claim 2, Eldridge discloses further comprising:

an instance display device for causing to display a selected function block definition or a selected function block instance together with said structure relationship of the analyzed structure relationship of said function block definition and said structure relationship of the analyzed structure relationship of said function block instance – (*e.g., using either key strokes such as arrows keys to select the ladder element – see at least col. 104: 21-59 with emphasis added*); and

a display judging device for causing said structure display device to display with an emphasis the structure relationship of said selected function block definition or selected function block instance or a corresponding portion of the structure relationship

of the function block instance – (e.g., *the current selected element ladder is highlight (emphasis)* – See at least col. 104: 21-59 with emphasis added).

As to claim 3, Eldridge discloses further comprising a display selector that selectively determines, when a command to switch display is received, whether a function block definition or a function block instance should be displayed, based on current display and current conditions of processing by said display and edit device and causes the determined to be made (e.g., *using either key strokes such as arrows keys (command)to select the ladder element to be display on the view screen – see at least col. 104: 21-59 with emphasis added*).

As to claim 4, further comprising a display selector that selectively determines, when a command to switch display is received, whether a function block definition or a function block instance should be displayed, based on current display and current conditions of processing by said display and edit device and causes the determined display to be made (e.g., *using either key strokes such as arrows keys (command)to select the ladder element to be display on the view screen – see at least col. 104: 21-59 with emphasis added*).

As per claims 5 and 6, Eldridge discloses a method of displaying a program including function blocks for a display and edit device – (e.g., *Ladder Logic Diagram D (Fig. 94), which contains Program Logic Blocks (PLBs)* – See at least col. 104: 1-10), said function blocks serving to use a language element referred to as function block definitions to establish input and output parameters, internal variables and operations algorithms of the function block and to create copies referred to as function block

instances by instantiating said function block definitions when said function block is incorporated in a user program (e.g., *Ladder Diagram Editor (Fig. 95)*, which conjunction with the Ladder library (ladder element (functions block definitions: *emphasis added*)) for implementing the ladder diagram logic – See at least col. 104: 1-65 and col. 105: 1-35 with *emphasis added*), said method comprising the step of:

accessing said program stored in a program memory (e.g., *ladder diagram editor would be implied that a processor/memory must be presented some how for the ladder diagram editor to be implemented – See at least Fig. 95 with associated text*) and analyzing structure relationship of function block definitions contained in said program (e.g., *ladder library, which contains common ladder element for carrying the ladder diagram logic – See at least col. 104: 11-59 and col. 106: 13-24, with emphasis added*);

accessing said program and analyzing structure relationship of function block instances contained in said program (e.g., *the ladder elements (object) are selected (instantiated) from the ladder library – See at least col. 104, 11-26, Fig. 95 and associated text, with emphasis added*); and

displaying simultaneously the analyzed structure relationship of function block definitions and structure relationship of the analyzed structure relationship of function block instance on the same display screen (e.g., the displaying of ladder elements for carrying out the ladder logic diagram in the Ladder Diagram Editor – See at least Fig. 95, col. 104: 1-65 and col. 105: 1-35, with *emphasis added*)).

Further regarding to claim 6, Eldridge discloses a computer-readable medium (e.g., *diskette – See at least col. 18: 46-48*) for implementing method as of claim above.

As to claim 7, Eldridge discloses wherein said block definition analyzer is for accessing said program stored in said program memory, analyzing algorithm of function block definition which is detected in said program, carrying out a process of judging presence or absence of any function block definition that is being called in said algorithm and, if a called function block definition is found to be present, connecting said called function block definition found to be present below an original function block definition, repeating said process until a function block definition not being called is reached to thereby analyze a connection relationship among function block definitions, and analyzing structure relationship of function block definitions contained in said program – *(e.g., the modified ladder elements are put back into the ladder library for latter use as a template -- See at least col. 105: 36- 67 and col. 106: 1-26 with emphasis added)* ; and

wherein said block instance analyzer is for accessing said program stored in said program memory, analyzing algorithm of function block instance which is detected in said program, carrying out a process of judging presence or absence of any function block instance that is being called in said algorithm and, if a called function block instance is found to be present, connecting said called function block instance found to be present below an original function block instance, repeating said process until a function block instance not being called is reached to thereby analyze a connection relationship among function block instances, and analyzing structure relationship of function block instances contained in said program *(e.g., the element ladder from the ladder library are being modified and connect to each other -- See at least col. 105: 36- 67 and col. 106: 1-26 with emphasis added)*; and

a structure display device for causing to simultaneously display structure relationship of the analyzed structure relationship of said function block definition and structure relationship of the analyzed structure relationship of said function block instance (e.g., *the displaying of ladder elements for carrying out the ladder logic diagram in the Ladder Diagram Editor – See at least Fig. 95, col. 104: 1-65 and col. 105: 1-35, with emphasis added*)...

As to claim 8, Eldridge discloses further comprising the step of accessing said program stored in a program memory, analyzing algorithm of function block definition which is detected in said program, carrying out a process of judging presence or absence of any function block definition that is being called in said algorithm and, if a called function block definition is found to be present, connecting said called function block definition found to be present below an original function block definition, repeating said process until a function block definition not being called is reached to thereby analyze a connection relationship among function block definitions, and analyzing structure relationship of function block definitions contained in said program (e.g., *the modified ladder elements are put back into the ladder library for latter use as a template -- See at least col. 105: 36- 67 and col. 106: 1-26 with emphasis added*); and

accessing said program, analyzing algorithm of function block instance which is detected in said program, carrying out a process of judging presence or absence of any function block instance that is being called in said algorithm and, if a called function block instance is found to be present, connecting said called function block instance

found to be present below an original function block instance, repeating said process until a function block instance not being called is reached to thereby analyze a connection relationship among function block instances, and analyzing structure relationship of function block instances contained in said program (*e.g., the element ladder from the ladder library are being modified and connect to each other -- See at least col. 105: 36- 67 and col. 106: 1-26 with emphasis added.*

Conclusion

8. The prior art made of record and not relied upon (cited on 892 form) is considered pertinent to application disclosure.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Lee whose telephone number is (571) 270-1648. The examiner can normally be reached on M-F (11am-7: 30pm) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marina Lee/

Examiner, Art Unit 2192

/Eric B. Kiss/

Eric B. Kiss

Primary Examiner, Art Unit 2192